I claim:

1. A substantially purified peptide having wound healing activity, the peptide comprising a sequence of 35 amino acids that is K-L-K-K-T-E-T-E-Q-K-N-P-L-E-V-L-K-E-K-K-E-V-V-E-L-K-E-K-K-V-V-I-E-N-P (SEQ ID NO: 5), the peptide being linear.

2. An isolated nucleic acid molecule encoding the peptide of claim 1.

3. The nucleic acid molecule of claim 2 that is DNA.

4. A vector comprising the DNA of claim 3 operably linked to at least one control element that influences the expression of the DNA.

5. A host cell transfected with the vector of claim 4 such that the cell expresses the peptide encoded by the vector of claim 4.

6. A method of producing a substantially purified peptide having a physiological activity comprising the steps of:

(a) culturing the host cell of claim 5; and

(b) isolating the peptide produced by the host cell to produce the substantially purified peptide.

7. A pharmaceutical composition comprising:

(a) the peptide of claim 1 in a physiologically effective quantity; and

(b) a pharmaceutically acceptable carrier.

8. The pharmaceutical composition of claim 7 wherein the pharmaceutically acceptable carrier comprises an extract of Hawaiian sea plants that acts as an emollient and moisturizer and includes chlorphenesin, phenoxyethanol, propylene glycol, and sodium dehydroacetate as preservatives, water, a polymer selected from the group consisting of carboxymethylcellulose and hydroxyethylcellulose, and at least one preservative selected from the group consisting of methylparaben and propylparaben.

9. A method for promoting wound healing in a mammal in need thereof comprising administering an effective quantity of the peptide of claim 1 to the mammal.